

UNITED STATES COURT OF FEDERAL CLAIMS

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SPACE EXPLORATION COMPANY	)
TECHNOLOGIES CORP.,	)
Plaintiff	)
	)
v.	)
	)
THE UNITED STATES,	) Case No. 1:14-cv-00354-SGB
Defendant	) Judge Susan G. Braden
	)
and	)
	)
	)
UNITED LAUNCH SERVICES, LLC,	)
Defendant-intervenor	)

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APPLICATION FOR ACCESS TO INFORMATION UNDER  
PROTECTIVE ORDER BY EXPERT CONSULTANT OR WITNESS

1. I, John J. Nieberding, am the President of Aerospace Engineering Associates, and hereby apply for access to protected information covered by the Protective Order issued in connection with this proceeding.
2. I have been retained by Charles J. Cooper, Cooper & Kirk PLLC and will, under the direction and control of that attorney, assist in the representation of United Launch Services, LLC in this proceeding.
3. I hereby certify that I am not involved in competitive decision making as discussed in *US. Steel Corp. v. United States*, 730 F.2d 1465 (Fed. Cir. 1984), for or on behalf of any party to this proceeding or any other firm that might gain a competitive advantage from access to the information disclosed under the protective order. I do not provide advice or participate in any decisions of such parties in matters involving similar or corresponding information about a competitor. This means, for example, I do not provide advice concerning, or participate in decisions about, marketing or advertising strategies, product research and development, product design or competitive structuring and composition of bids, offers, or proposals with respect to which the use of protected information could provide a competitive advantage.
4. My professional relationship with the party for whom I am retained in this proceeding and its personnel is strictly as a consultant on issues relevant to the proceeding. Neither I nor any member of my immediate family holds office or a management position in any company that is a party in this proceeding or in any competitor or potential competitor of a party.
5. I have attached the following information:
  - a. a current resume describing my education and employment experience to date;  
*See Attachment A*
  - b. a list of all clients for whom I have performed work within the two years prior to the date of this application and a brief description of the work performed;  
*See Attachment B.*

c. a statement of the services I am expected to perform in connection with this proceeding;

*See Attachment C*

d. a description of the financial interests that I, my spouse, and/or my family has in any entity that is an interested party in this proceeding or whose protected information will be reviewed; if none, I have so stated;

*See Attachment D*

e. a list identifying by name of forum, case number, date, and circumstances all instances in which I have been granted admission or been denied admission to a protective order, had a protective order admission revoked, or have been found to have violated a protective order issued by an administrative or judicial tribunal; if none, I have so stated; and

*See Attachment E*

f. a list of the professional associations to which I belong, including my identification numbers.

*See Attachment F*

6. I have read a copy of the Protective Order issued by the court in this proceeding. I will comply in all respects with all terms and conditions of that order in handling any protected information produced in connection with the proceeding. I will not disclose any protected information to any individual who has not been admitted under the Protective Order by the court.

7. For a period of five years after the date this application is granted, I will not engage or assist in the preparation of a proposal to be submitted to any agency of the United States government for Space Launch Vehicle Services when I know or have reason to know that any party to this proceeding, or any successor entity, will be a competitor, subcontractor, or teaming member.



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Signature of Expert or Consultant

September 29, 2014

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Date Executed

John J. Nieberding

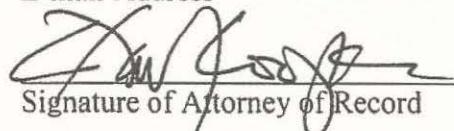
Typed Name and Title

W: 440-899-9316 F: 440-899-9316

Telephone & Facsimile Numbers

joenieber@wowway.com

E-mail Address



Signature of Attorney of Record

September 30, 2014

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Date Executed

Charles J. Cooper

Typed Name and Title

(202) 220-9600 (202) 220-9601

Telephone & Facsimile Numbers

ccooper@cooperkirk.com

E-mail Address

**ATTACHMENT A  
RESUME FOR JOHN J. NIEBERDING**

**John J. (Joe) Nieberding**

27687 Whitehill Circle  
Westlake, Ohio 44145  
Voice: 440-835-2371  
Cell: 440-503-4758  
Fax: 440-899-9316  
E-Mail:joenieber@wowway.com

**Professional Experience**

**January, 2000 to Present:**

- **Co-founded Aerospace Engineering Associates (AEA) January 1, 2007**
  - Authored and teach two day course: Mission Success First-Lessons Learned
  - Supported several NASA review boards, including ARES 1-X CDR and ARES 1 Thrust Vector Control PDR
  - Provided advice to D.C. law firms as launch vehicle expert in 2013 and 2014 in support of federal litigation matters
- **Aerospace Consultant (Self Employed)**
  - **Jan 2007-May 2007:** Support Glenn Research Center (Alphaport, Inc.);
    - Independently reviewed Service Module configuration risks
    - Independently reviewed Ares 1-X separation joint configuration
    - Assessed Ares 1 jettison on sensed heating
  - **February 2005-December 2006:** Support Glenn Research Center (Alphaport, Inc.)
    - Assembled contractor team for lunar surface power
    - Assessed Ares 1 flight wind loading
    - Supported Educate proposal
    - Supported team to assess Glenn readiness for new flight project
    - Assembled and presented Lessons Learned course, on-going effort
    - Support various launch vehicle courses taught at Glenn, on-going effort
  - **March 2005:** Member of review team for Ohio Aerospace Institute (OAI) NASA proposals
  - **July/August 2004 and March 2005:** Member of review team for NASA Institute for Advanced Concepts (NIAC) proposals
  - **June 2004 to Present:** Member of NASA independent review team examining transportation technologies appropriate for the new Exploration Initiative.
  - **November 2003 to June 2004:** Member of Missile Defense Agency (MDA) Independent Review Team.
  - **February, 2002 to May, 2004:** Member of NASA Hq. Synthesis Team for the Integrated Space Transportation Plan (ISTP) and the Space Launch Initiative (SLI) Program. The review resulted in major restructuring of the SLI program to indefinitely delay the development of the reusable launch vehicle, and to

restructure the OSP program into the CEV. The task most recently examined STS/ ISS resupply options if the STS were to be terminated in 2010.

- November, 2002-May, 2004: Member of NASA NGLT (Next Generation Launch Technology) Independent Review Team.
- October, 2002 to January, 2003: Member of the NASA Hq. independent review team for the Jovian Icy Moon Tour Mission, potentially NASA's first use of nuclear upper stage propulsion. Responsible for re-introducing upper stage combined nuclear electric/nuclear thermal propulsion into Code S mission trade space.
- January 2000 to February 2002: Chairman, Expendable Launch Vehicle Services Red Team
  - Chaired, for GSFC and JPL senior Center management, the independent Red Teams for seven NASA missions on Atlas, Delta, and Pegasus –all successful launches.
  - Chaired the NASA independent Red Team reviews of the Atlas and Delta fleets.

### **January 2000: Retired from NASA Glenn**

#### **October 1996 to December 1999 (Senior Executive Service Position):**

- Manager, Advanced Concepts, NASA Glenn Research Center
  - Advised Glenn senior management on potential advanced applications for Glenn communications, power, propulsion, and space transportation technologies. Led Glenn team in preparing for advanced robotic and human missions to Mars. For Mars mission planning, secured for Glenn the lead responsibilities for power, cryogenics, and advanced propulsion.
    - Chaired NASA Headquarters Independent Assessment Review for X-33, 1998 and 1999
    - Chaired NASA Headquarters EOS-AM Independent Assessment Team, 1999

#### **February 1987 to October 1996(Senior Executive Service Position):**

- Chief, Advanced Space Analysis Office, NASA Lewis Research Center
  - Led group of 60 people who conceived, directed, and evaluated all phases of advanced space system planning for Lewis. Developed extensive NASA, industry, DOD, DOE, NOAA, and international contacts for teaming efforts. Office's studies (hundreds) were often used by NASA Headquarters to select appropriate transportation, propulsion, power, and communications systems for advanced NASA applications.
  - Led Lewis advanced planning for space missions, especially analyses of current and advanced launch vehicle systems and their various applications. Nationally recognized expert in this area. As member of, and then senior advisor to, the Lewis launch team at KSC, played key role in more than 65 launches (since 1966) of Atlas and Titan vehicles. Expertise was critical to the successful launches of many historic and precedent-setting spacecraft, including early Intelsat and Comstar commercial communications satellites, and NASA missions such as Surveyor, Mariner, Pioneer, Viking, Voyager, and Cassini.
  - Led NASA team which conducted detailed assessment of Titan IV launch vehicle reliability, versus potential Shuttle reliability, for Cassini launch. As a result, senior national review committee unanimously accepted recommendation that Cassini stay on Titan.
  - Led Lewis mission design, deployment, and operations strategy team for launch, orbital maneuvering, and final longitudinal placement for the Advanced Communications Technology Satellite (ACTS) launch from Shuttle/Transfer Orbit Stage in 1993. As a result, ACTS was placed on station with a substantial amount of excess fuel.

- Led, at the request of the NASA Administrator, the first (1992) discussions in Russia of potentially using U.S. or Russian Expendable Launch Vehicles to support the International Space Station (ISS).
- Led International Space Station (ISS) redesign transportation team in 1993. Led numerous studies to assess the practicality of supporting ISS with not only Shuttle, but also with Atlas, Delta, Titan, and international vehicles including Japanese H vehicles, Arianne, Long March, Proton, Zenit, and Energia. Also led studies of the complete gamut of possible upper stages, both domestic and foreign. Led NASA discussions with the Russians, per NASA administrator request, on the potential use of Russian ELV's to support ISS. Studies led to changing ISS orbital inclination from 28.5 deg. to 51.6 deg. Conducted first discussions with Russians on potential use of FGB Universal Block stage for ISS propulsion; system baselined as first launch in ISS program.
- Led numerous joint NASA/industry studies of launching small commercial payloads on small ELV's, or clustered on intermediate ELV's, both domestic and foreign. Addressed full range of spacecraft integration issues, including electrical, mechanical, mission design, acoustics, shock, vibration, dynamic loads, control stability, software, programmatic, etc.
- Served as senior advisor for NASA in definition of new approach to procure complete "launch services" rather than only launch vehicles. Co-authored 1990 paper, published in Space Commerce Magazine, titled "U.S. ELV's, A Perspective on Their Past and Future".
- Led early studies demonstrating the benefits of using advanced electric systems for primary communications spacecraft propulsion. Results indicated potential for very substantial (i.e. more than 25%) spacecraft system weight reductions which could enhance U.S. commercial competitiveness. These, and other communications architecture studies performed, could impact future spacecraft constellation installation and replacement strategies.
- Led numerous launch vehicle reliability assessments, especially relating to nuclear safety issues.
- Served as senior member of several Lewis strategic planning committees. Involved extensively with external technical and political issues with NASA Headquarters, other centers, industry partners, and international partners (especially the Russians).
- Recruited, mentored, and developed numerous engineers, encouraging creativity, personal excellence, and growth.

#### **December 1982-February 1987:**

- **Chief, Systems Analysis Branch, Lewis Research Center**
  - Led group of about 35 people who conducted in-house analytical efforts to independently assess contractor work in areas of trajectory analysis, mission design, ground and flight software, acoustics, control stability, and structural dynamics. Established flight certification of these analyses for all Atlas/Centaur and planned Shuttle/Centaur missions. Conducted the structural dynamic modal survey hardware testing of the Centaur vehicle in order to verify the analytical models prior to integration with the Shuttle.
- **Head, Checkout and Flight Software Section, Lewis Research Center**
  - Led group of 8 people who verified ground checkout and on-board flight software for all Atlas/Centaur and Titan/Centaur missions. Chaired Lewis Software Review Board. Became recognized NASA expert in software design and configuration control. Certified all software prior to launch.

**September 1974- March 1977:**

• **Head, Performance and Trajectory Section, Lewis Research Center**

- Led group of 8 people who conducted in-house and verified contractor mission and trajectory design work for early Atlas/Centaur and Titan/Centaur missions, including the Orbiting Astronomical Observatory, High Energy Astronomical Observatory, Intelsat, Comsat, FLTSATCOM, Helios, Viking, and Voyager missions. Co-designer of Centaur in-flight retargeting software, still flown today.

**July 1966- September 1974:**

• **Aerospace Engineer, Performance and Payload Integration Sections, Lewis Research Center**

- Assisted in the evaluation of the design and checkout of mission performance and trajectory calculations for Atlas/Centaur and Titan/Centaur missions. Co-designed the Atlas/Centaur system for launching through upper level winds (ADJUST), still in use today.

**Education**

1966: B.S. Physics, John Carroll University, University Heights, Ohio

1972: M.S. Engineering Science, Toledo University, Toledo, Ohio

**Awards**

- **Presidential Rank, Meritorious Executive**, 1994: “for sustained superior accomplishment in management of programs of the United States Government and for noteworthy achievement of quality and efficiency in the public service”
- **NASA Exceptional Achievement**, 1994: “for significant contributions and dedicated efforts in support of the space station redesign which have truly enhanced the nation’s space flight program”
- **NASA Exceptional Service**, 1993: “for outstanding contributions to many NASA launch vehicle missions and excellence in advanced mission planning and advocacy”
- **Space Station Redesign Team**, individual and group, 1993
- **Launch Team Support**, 1966-present: more than 20

**ATTACHMENT B**  
**CLIENT LIST FOR JOHN J. NIEBERDING**  
**CLIENT DESCRIPTION OF WORK PERFORMED**

- Wilmer Hale - Provided advice as launch vehicle expert in 2013 in support of a federal litigation matter
- Hunton Williams - Provided advice as launch vehicle expert in 2014 in support of a federal litigation matter
- Taught (along with Mr. Lawrence Ross) a class titled "Mission Success First: Lessons Learned" to:
  - National Aeronautics and Space Administration (NASA)
  - European Space Agency (ESA)
  - Turkish Aerospace Industries, Inc. (TAI)
  - Disneyland
  - DSO National Laboratories, Singapore

**ATTACHMENT C**  
**STATEMENT OF SERVICES FOR JOHN J. NIEBERDING**

I have been retained to assist outside counsel for United Launch Services, LLC with respect to bid protest proceedings. My assistance is expected to include the review and analysis of materials and documents related to new entrant certification, mission capabilities, mission design, trajectory analysis, and capabilities to perform EELV program missions.

**ATTACHMENT D**  
**SUMMARY OF RELEVANT FINANCIAL INTERESTS**  
**FOR JOHN J. NIEBERDING**

I, John J. Nieberding, and my wife and family do not hold financial interests in any entity that is an interested party in this action or whose protected material will be reviewed. This statement does not pertain to mutual funds or other financial vehicles, which may be held by me, my wife or my family, for which the owner does not have control over individual purchases of securities.

**ATTACHMENT E**  
**PROTECTIVE ORDER HISTORY FOR JOHN J. NIEBERDING**

None

**ATTACHMENT F  
PROFESSIONAL ASSOCIATION SUMMARY  
FOR JOHN J. NIEBERDING**

AIAA Senior Member, member # 87512